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## COMPOSITIONS AND METHODS FOR INDUCTION OF ACTIVE AUTOIMMUNITY

## **Abstract**

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A recombinant first antigen, coupled with a foreign protein (such as immunoglobulin Fc from different species), can be used as a vaccine to induce active auto-immunity specifically through a T cell-dependent antibody response. The induced autoantibodies can recognize self-antigen *in vivo* and trigger immune responses to reduce or eliminate a target autologous antigen. Since there is evidence that the pathogenesis of some diseases, such as cancer, allergy, arthritis, atherosclerosis, graft rejection, or other inflammatory diseases, are caused by increased levels of certain autologous proteins, the instant compositions and methods provide a method of inducing autoantibodies to down-regulate the levels of a target autologous antigen or cells expressing the antigen to ameliorate diseases or disorders.

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